IN THE CIRCUIT COURT OF THE NINTH JUDICIAL CIRCUIT IN AND FOR ORANGE COUNTY, FLORIDA

STATE OF FLORIDA COUNTY OF ORANGE

| OPD Case #: 1 | 989-9266 |
|-----------------|----------|
| Clerk's Case #: | |

SEARCH WARRANT

THIS SEARCH WARRANT IS ISSUED PURSUANT TO FLORIDA STATUTE s. 92.605. A RESPONSE IS DUE WITHIN 20 BUSINESS DAYS OF RECEIPT OF THIS WARRANT UNLESS A LONGER TIME PERIOD IS STATED HEREIN.

PURSUANT TO F.S. 934.25(6) and 18 U.S.C. 2705(b) - YOU ARE ORDERED NOT TO DISCLOSE THE EXISTENCE OF THIS WARRANT TO THE CONCLUSION OF THE INVESTIGATION. <u>ANY SUCH DISCLOSURE WILL IMPEDE THE INVESTIGATION AND THEREBY OBSTRUCT JUSTICE</u>.

TO: ORLANDO ROLON, CHIEF OF THE ORLANDO POLICE DEPARTMENT AND ANY OF HIS LAW ENFORCEMENT OFFICERS OR AGENTS THEREOF, STATE OF FLORIDA, AND ANY LAW ENFORCEMENT OFFICER, STATE OR FEDERAL

WHEREAS, complaint on oath and in writing supported by affidavit, having been made this day before the undersigned;

WHEREAS, said facts made known to me have caused me to certify and find that there is probable cause to believe that certain evidence, to wit:

GEDmatch information related to Orlando Police Department Case Number: 1989-9266

PROPERTY TO BE PROVIDED BY GEDmatch, INC.

Information provided by GEDmatch indicates the following information is available to law enforcement upon service of proper process:

- GEDmatch kit number for all one-to-one matches
- Letter following GEDmatch kit number for one-to-one matches
- Email address for all one-to-one matches
- Real name associated with all one-to-one matches
- Alias associated with all one-to-one matches
- Date and time stamp of one-to-one matching profile's creation date
- Most recent logins for all one-to-one matches
- Registered mobile number for all one-to-one matches
- Many-to-one report

GEDmatch Kit Data for Orlando Police Department Case Number: 1989-9266

- "Predict your eye colour" report
- Admixture Reports
- Archaic DNA Comparisons
- All GEDCOMs

One-to-one Report for Orlando Police Department Case Number: 1989-9266

- Kit Number Matches (to include first character to show testing company)
- Type (chip version of the test kit)
- Sex (gender of tester entered by user)
- Haplogroup (to include mitochondria and Y chromosome)
- Autosomal (information on how much DNA is shared on chromosomes 1 to 22)
 - o Total cM (total cM shared)
 - o Largest cM (the size of the longest individual segment of DNA)
 - o Generation (the estimated number of generations back to the MRCA)
- X-DNA (information on how much X-DNA is shared on chromosome 23
 - o Total cM (total cM shared)
 - o Largest cM (the size of the longest individual segment of DNA)
- Matching Segment Report for all matches
- Triangulation Report
- Relationship Predictor
- Name (the match's name or optional alias)
- Email (email address of the match or kit administrator)

Under the control of:

GEDmatch, Inc. 710 First Avenue South Lake Worth, Florida 33460

Curtis C. Rogers – Vice President / Secretary 270 Captains Walk – Apartment 319 Delray Beach, Florida 33483

> John Olson - President / Director 710 First Avenue South Lake Worth, Florida 33460

which is evidence of a felony violation of the laws of Florida, or which is contraband per se and evidence of a violation of the laws of Florida, to wit:

Florida State Statutes:

794.011 (3) – Sexual Battery with a Deadly Weapon (3 Counts) 787.01 (1)(A) – Armed Kidnapping (3 Counts) 810.02 (1)(B)(1) – Armed Burglary with a Battery Within (3 Counts)

AND WHEREAS, the facts establishing the grounds for this application being set forth in the affidavit of **Detective Michael Fields (15141)**, a member of the Orlando Police Department.

PROPERTY SOUGHT:

Your Affiant seeks to seize the below-described evidence pursuant to Florida Statute § 92.605, 933.02 and § 934.23, as well as the United States Code 18 U.S.C. 2703, and California Statute § 1524.2, which compel out-of-state electronic communication services or remote computing services that provide such services to the public to provide information requested pursuant to search warrants, court orders or subpoenas issued in the State of Florida. However, because the out-of-state electronic communication service or remote computing service provider has no reasonable means to distinguish evidence of the crimes from any other records contained within the sought-after account, your Affiant seeks to compel the service provider to seize a copy of all records pertaining to the account and provide the entirety of the records to your Affiant. Once your Affiant has obtained those records, your Affiant shall conduct an actual search of the items obtained from the out-of-state electronic communication service or remote computing service provider in order to sort the evidence of the crimes articulated below and specifically sought herein, which may be intermingled with innocent or innocuous documents or records.

THE FACTS upon which the Affiant's belief is based have been stated under oath and are set out in Affiant's GENERAL AFFIDAVIT AND APPLICATION FOR SEARCH WARRANT.

NOW THEREFORE, the facts upon which the belief of said Affiant is based as set out in said GENERAL AFFIDAVIT AND APPLICATION FOR SEARCH WARRANT are hereby deemed sufficient to show probable cause for the issuance of a Search Warrant in accordance with the application of said Affiant.

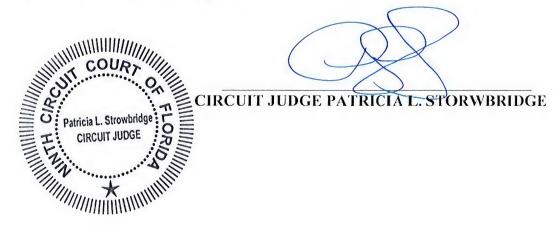
I HEREBY COMMAND YOU, the Affiant, Detective Michael Fields and/or the Chief of Police and/or Detectives of the Orlando Police Department, State c Florida with necessary assistance, including law enforcement officers or computer examiners from other agencies, to search the premises previously described. You may search for the property described previously by serving this search warrant via facsimile or U.S. Mail upon the proper legal representative of GEDmatch Inc. in conformance with Florida Statute 92.605.

I FURTHER COMMAND GEDmatch Inc. to provide the requested data to Detective Michael Fields within 20 business days. GEDmatch Inc. shall disclose responsive data, if any, by sending to Detective Michael Fields, 1250 West South Street, Orlando, Florida, 32805 using the US Postal Service or another courier service, notwithstanding 18 U.S.C. 2252A or similar statute or code. GEDmatch Inc. may also disclose responsive data to the affiant electronically by allowing access to the GEDmatch website via the GEDmatch Law Enforcement Portal. GEDmatch Inc. may also disclose responsive data to the Affiant electronically via email at michael.fields@cityoforlando.net.

I FURTHER COMMAND that any property seized be listed on a RETURN AND INVENTORY filed within this Judicial Circuit within ten (10) days from date of execution.

YOU ARE FURTHER COMMANDED to deliver a copy of this SEARCH WARRANT to the legal representative of GEDmatch Inc. If property is taken under the warrant, you shall deliver to the legal representative a written inventory of the property taken and receipt for the same.

WITNESS my hand and seal this 14th day of June, 2019.



IN THE CIRCUIT COURT OF THE NINTH JUDICIAL CIRCUIT IN AND FOR ORANGE COUNTY, FLORIDA

STATE OF FLORIDA COUNTY OF ORANGE

| OPD Case #: 19 | 989-9266 |
|-----------------|----------|
| Clerk's Case #: | |

AFFIDAVIT FOR SEARCH WARRANT

BEFORE ME, <u>Circuit Judge Patricia L. Storwbridge</u>, in and for Orange County, Florida, personally came Detective Michael Fields (15141), a member of the Orlando Police Department, who being first duly sworn, deposes and says that Affiant has probable cause to believe that certain evidence, to wit:

GEDmatch information related to Orlando Police Department Case Number: 1989-9266

PROPERTY TO BE PROVIDED BY GEDmatch, INC.

Information provided by GEDmatch indicates the following information is available to law enforcement upon service of proper process:

- GEDmatch kit number for all one-to-one matches
- Letter following GEDmatch kit number for one-to-one matches
- Email address for all one-to-one matches
- Real name associated with all one-to-one matches
- Alias associated with all one-to-one matches
- Date and time stamp of one-to-one matching profile's creation date
- Most recent logins for all one-to-one matches
- Registered mobile number for all one-to-one matches
- Many-to-one report

GEDMatch Kit Data for Orlando Police Department Case Number: 1989-9266

- "Predict your eye colour" report
- Admixture Reports
- Archaic DNA Comparisons
- All GEDCOMs

One-to-one Report for Orlando Police Department Case Number: 1989-9266

- Kit Number Matches (to include first character to show testing company)
- Type (chip version of the test kit)
- Sex (gender of tester entered by user)
- Haplogroup (to include mitochondria and Y chromosome)
- Autosomal (information on how much DNA is shared on chromosomes 1 to 22)
 - o Total cM (total cM shared)
 - o Largest cM (the size of the longest individual segment of DNA)
 - o Generation (the estimated number of generations back to the MRCA)
- X-DNA (information on how much X-DNA is shared on chromosome 23

- o Total cM (total cM shared)
- o Largest cM (the size of the longest individual segment of DNA)
- Matching Segment Report for all matches
- Triangulation Report
- Relationship Predictor
- Name (the match's name or optional alias)
- Email (email address of the match or kit administrator)

Under the control of:

GEDmatch, Inc. 710 First Avenue South Lake Worth, Florida 33460

Curtis C. Rogers – Vice President / Secretary 270 Captains Walk – Apartment 319 Delray Beach, Florida 33483

> John Olson – President / Director 710 First Avenue South Lake Worth, Florida 33460

which is evidence of a felony violation of the laws of Florida, or which is contraband per se and evidence of a violation of the laws of Florida, to wit:

Florida State Statutes:

794.011 (3) – Sexual Battery with a Deadly Weapon (3 Counts)
787.01 (1)(A) – Armed Kidnapping (3 Counts)
810.02 (1)(B)(1) – Armed Burglary with a Battery Within (3 Counts)

PROPERTY SOUGHT:

Your Affiant seeks to seize the below-described evidence pursuant to Florida Statute § 92.605, 933.02 and § 934.23, as well as the United States Code 18 U.S.C. 2703, and California Statute § 1524.2, which compel an out-of-state electronic communication service or a remote computing service that provides such services to the public to provide information requested pursuant to search warrants, court orders or subpoenas issued in the State of Florida. However, because the out-of-state electronic communication service or remote computing service provider has no reasonable means to distinguish evidence of the crimes from any other records contained within the sought-after account, your Affiant seeks to compel the service provider to seize a copy of all records pertaining to the account and provide the entirety of the records to your Affiant. Once your Affiant has obtained those records, your Affiant shall conduct an actual search of the items obtained from the out-of-state electronic communication service or remote computing service provider in order to sort the evidence of the crimes articulated below and specifically sought herein, which may be intermingled with innocent or innocuous documents or records.

Your Affiant, Detective Michael Fields, has been a sworn police officer with the Orlando Police Department since July 18, 2005. Your Affiant was previously sworn by the Oviedo Police Department, in Oviedo, Florida, from August of 1996 to July 18, 2005. Your Affiant was also a duly sworn police officer with the Windermere Police Department in Windermere, Florida from July of 1995 to August of 1996. Your Affiant is presently assigned to the Orlando Police Department Criminal Investigations Division – Homicide Unit.

Your Affiant is a certified Law Enforcement Officer by the State of Florida and pursuant to Section 943.14(1)(2) Florida State Statute and Sections 11b-7, Florida Administrative Code relating to the Standards and Training. Your Affiant attended the Osceola Criminal Justice Academy for basic certification as an officer. During that time, the basics of investigations were taught. Upon completion of the field training program at Windermere Police Department, your Affiant was assigned to road patrol. Upon completion of the field training program at Oviedo Police Department, your Affiant's first six months were spent on road patrol for the city. Then, your Affiant was assigned to a street-level drug unit for approximately twenty-six months. Your Affiant was then assigned to the City/County Investigative Bureau (CCIB) and was duly appointed as a Deputy Sheriff of the Seminole County Sheriff's Office from April 26, 1999 to September 29, 2000. There, your Affiant was assigned to a county drug task force that combated mid-level drug activity. Your Affiant was then assigned to the Drug Enforcement Administration Central Florida High Intensity Drug Trafficking Area Heroin Task Force (DEA H.I.D.T.A. Task Force) from October 1, 2000 to October 2001. Your Affiant was then assigned to the Drug Enforcement Administration Task Force from October 2001 to August 1, 2002. Upon completion of the field training program at the Orlando Police Department, your Affiant was assigned to road patrol. Your Affiant was then assigned to the Joint Anti-Crime Task Force in the capacity of a high crime patrol officer from October 2007 to February 2008. Your Affiant was then assigned to the Orlando Police Department Drug Enforcement Division from February 2008 to March 2010. Your Affiant was then assigned to Orlando Police Department Criminal Investigations Division and was assigned to the Property Unit from March 2010 to March 2011, Assault & Battery Unit from March 2011 to August of 2012, and the Robbery Unit from August 2012 to December 2012. Your Affiant is currently assigned to the Orlando Police Department Homicide Unit.

In 1997, your Affiant attended a twenty-four-hour Search Warrant & Search Techniques School (Valencia Community College), an eight-hour Investigative Interview School (Valencia Community College), and an eight-hour Case Initiation & Preparation Informant Management School (Valencia Community College). In 1999, your Affiant attended an eight-hour Search & Seizure School (Valencia Community College), eight-hour Tactical Communication School (Daytona Beach Community College), and a sixteen-hour On-Line Undercover Investigations School (Innocent Images - Federal Bureau of Investigations). In 2000, your Affiant attended a forty-hour Analytical Investigative Techniques School (Multijurisdictional Counterdrug Task Force Training). In 2001, your Affiant attended a forty-hour Electronic & Technical Surveillance School (National Technical Investigators Association Training), and a twenty-four-hour Interception of Secure Communications School (Multijurisdictional Counterdrug Task Force Training). In 2003, your Affiant attended a twenty-four-hour Handwriting Identification & Statement Analysis School (Orange County Sheriff's Office). In 2004, your Affiant attended an eighthour Introduction to Internet Investigation School (Florida Department of Law Enforcement), a forty-hour Homicide Investigation School (Institute of Police Technology & Management), and a forty-hour Reid Technique of Interview & Interrogations (John Reid & Associates). In 2011, your Affiant attended a twenty-four hour Conducting Death & Homicide Investigation School (Homicide Training Institute). In 2012, your Affiant attended a forty-hour Advanced Practical Homicide Investigations School (Pennsylvania Homicide Investigations Institute), a forty-hour Police Medicolegal Investigation of Death (Miami Dade Medical Examiner's Office), and a thirty-two-hour National Technical Investigators' Association School (NATIA). In 2013, your Affiant attended a thirty-four-hour International Homicide Investigators Association Training Symposium, a sixteen-hour Understanding and Applying the Principals of Force Science (Force Science Institute) and a forty-hour Florida Homicide Investigators Association Training Conference. In 2014, your Affiant attended a forty-hour Blood Pattern Analysis school, a sixteen-hour Crime and the Social Media training, a twelve-hour International Association of Chiefs of Police conference, and a forty-hour Florida Homicide Investigators conference. In 2015, your Affiant attended a forty-hour American Academy of Forensic Science conference.

Your Affiant has performed a tremendous amount of research in autosomal DNA testing. Your Affiant has successfully completed a genetic genealogy case (Orlando Police Department 2001-380051), the murder of Christine Franke.

Your Affiant has taught more than ten (10) courses in genetic genealogy for law enforcement classes at symposiums and conferences throughout the United States. Your Affiant has consulted in at least seven (7) genetic genealogy investigations throughout the United States.

Your Affiant received training on executing search warrants, complex investigations and the methods used by criminals to hide their activity.

Your Affiant has participated in and conducted investigations of violations of various state and federal laws.

PROBABLE CAUSE:

The facts tending to establish the grounds for this application and the probable cause of Affiant believing that such facts exist are as follows:

Orlando Police Department Case Number: 1988-31222

| | pproximately 0502 hou Diver (6629), received | epartment Communications Center from a female, later |
|----------------------|---|--|
| identified as | | |
| were dispatched to | | of the Orlando Police Department, rence to the Armed Sexual Battery. h the victim, |
| The Orlando Fire Dep | partment responded, | |
| | | |

Detective Neil McDonald III (7295), of the Orlando Police Department, was on call for the Orlando Police Department Sex Crimes Unit when he responded to the aforementioned sex crimes case. Detective Neil McDonald III was to be the lead detective on the case. Crime Scene Investigator Ronald Rogers (5090) would be assigned to be the lead Crime Scene Investigator with Crime Scene Investigator Francis Hanlin Jr. assisting.

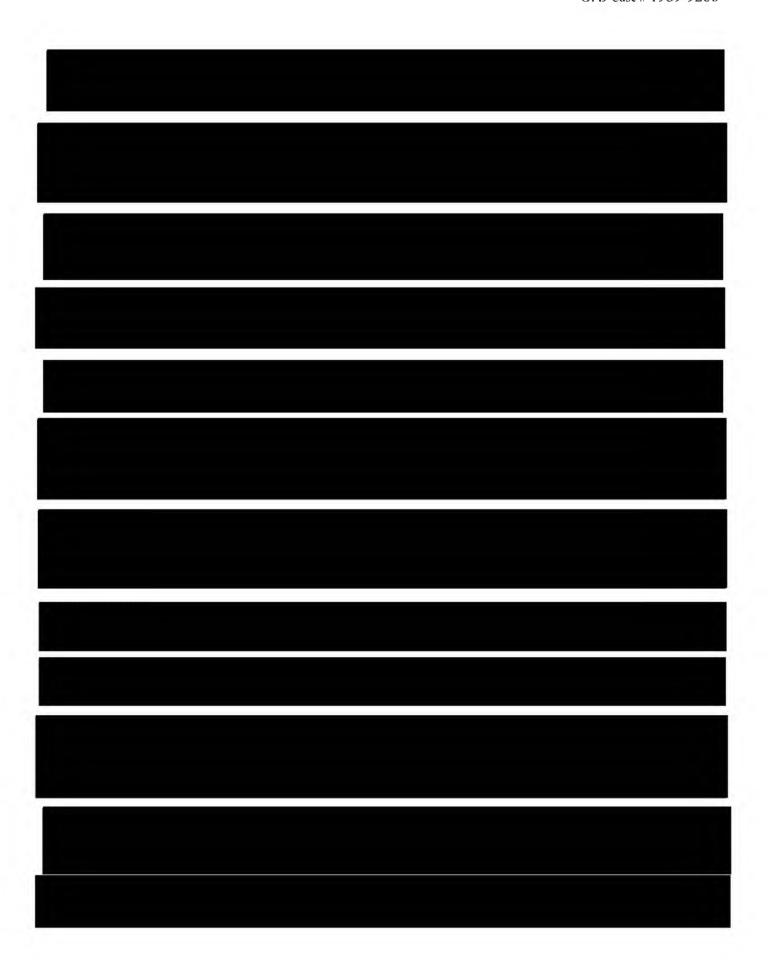
Detective Neil McDonald III arrived on the scene and subsequently was provided with a briefing by Officer Tim Davis and Officer Arthur Green.

| Detective Neil McDonald III interviewed |
|--|
| |
| |
| |
| |
| |
| |
| |
| Detective Neil McDonald III asked |
| Detective Neil McDonald III interviewed |
| Detective Freit Preporting III interviewed |

| Detective Deborah Driscoll Beavers (1115) responded to the area and made contact |
|--|
| |
| Detective Neil McDonald III learned |
| |
| Detective Neil McDonald III transported |
| |
| |
| The following items were examined by the Florida Department of Law Enforcement: |
| |
| |
| When Officer Tim Davis and Officer Arthur Green were on the scene, they called for assistance from Orlando Police K-9. |
| |
| When Detective Neil McDonald III was interviewing |
| It was the opinion of Detective Neil McDonald III |

| Detective Neil McDonald interviewed |
|--|
| |
| On June 20, 1988, Detective Neil McDonald contacted |
| |
| On July 2, 1988, Detective Neil McDonald learned |
| On June 1, 2019, your Affiant checked the Florida Department of Corrections Database, |
| On June 1, 2019, your Affiant checked the Florida Department of Law Enforcement DNA Database |
| If the identity of the defendant is determined, and based on the aforementioned facts, your Affiant believes the defendant did commit violations of the State of Florida, to wit: |
| Chapter 794.011 (3), the laws prohibiting Sexual Battery with a Deadly Weapon, a life felony, when the defendant |
| Chapter 787.01 (1)(A), the laws prohibiting Armed Kidnapping, a life felony, when the defendant |
| Chapter 810.02 (1)(B)(1), the laws prohibiting Armed Burglary with a Battery Within, a life felony, when the defendant |
| Orlando Police Department Case Number: 1988-39431 |
| On July 30, 1988, at approximately 0502 hours, the Orlando Police Department Communications Center Specialist Carol Brookfield (1247) received a 911 phone call from a female, later identified as |
| Officer Kevin Powell (1029) and assisting Orlando Police Department officers were dispatched in reference to the Armed Sexual Battery. Upon |
| arrival Officer Kevin Powell met with the victim, |

| The Orlando Fire Department responded, |
|---|
| |
| |
| |
| |
| Detective Deborah Driscoll Beaver (1115), of the Orlando Police Department, was on call for the Orlando Police Department Sex Crimes Unit when she responded to the aforementioned sex crimes case. Detective Deborah Driscoll Beaver was assigned to be the lead detective on the case. Crime Scene Investigator Dennis McDowell (3800) would be assigned to be the lead Crime Scene Investigator. |
| Detective Deborah Driscoll Beaver arrived on the scene at approximately 0810 hours and was provided a briefing by Officer Kevin Powell. |
| Detective Deborah Driscoll Beaver interviewed |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |



| Detective Deborah Driscoll Beavers interviewed |
|---|
| Detective Deborah Driscoll Beavers transported |
| |
| |
| The following items were examined by the Florida Department of Law Enforcement: |
| |
| |
| |
| |
| |
| |
| |
| f the identity of the defendant is determined, and based on the aforementioned facts, your Affiant believe he defendant did commit violations of the State of Florida, to wit: |
| Chapter 794.011 (3), the laws prohibiting Sexual Battery with a Deadly Weapon, a life felony, when the defendant |
| Chapter 787.01 (1)(A), the laws prohibiting Armed Kidnapping, a life felony, when the defendant |
| |
| Chapter 810.02 (1)(B)(1), the laws prohibiting Armed Burglary with a Battery Within, a life felony, who the defendant |

Orlando Police Department Case Number: 1989-9266

| On February 16, 1989, at approximately 2243 hours, the Orlando Police Department Communications Center Specialist Stacey Kelly (2853) received a 911 phone call |
|---|
| identified |
| |
| Officer Daniel Fernandez (1901), of the Orlando Police Department, was dispatched to |
| |
| |
| |
| |
| The Orlando Fire Department responded, |
| |
| |
| provided a written statement for Officer Daniel Fernandez. |
| Detective Donald Ostermeyer (9052), of the Orlando Police Department, was on call for the Orlando Police Department Sex Crimes Unit when his supervisor, Sergeant Robert Beal (1421), contacted him regarding the aforementioned sex crimes case. Sergeant Robert Beal assigned Detective Donald Ostermeyer to be the lead detective on the case. Crime Scene Investigator Steen would be assigned to be the lead Crime Scene Investigator. |
| Detective Donald Ostermeyer arrived on the scene and was subsequently provided a briefing by Officer Daniel Fernandez. |
| Detective Donald Ostermeyer interviewed |
| |
| |
| |
| |
| |
| |
| |
| |
| |

| Detective Donald Ostermeyer transported |
|---|
| |
| |
| |
| The following items were examined by the Florida Department of Law Enforcement: |



If the identity of the defendant is determined, and based on the aforementioned facts, your Affiant believes the defendant did commit violations of the State of Florida, to wit:

Chapter 794.011 (3), the laws prohibiting Sexual Battery with Threat of Physical Force, a life felony, when the defendant

Chapter 787.01 (1)(A), the laws prohibiting Kidnapping, a first degree felony, when the defendant

Chapter 810.02 (1)(B)(1), the laws prohibiting Burglary with a Battery Within, a first-degree felony, when the defendant

The aforementioned three (3) sexual battery cases were linked using restriction fragment length polymorphism (RFLP), which was DNA testing available in 1988 and 1989. Since then, one (1) case (Orlando Police Department Case Number: 1989-9266), has been converted over to Short Tandem Repeat (STR) analysis, which is the common method used today by the FBI CODIS Database and by the Florida Department of Law Enforcement (FDLE).

The aforementioned DNA/seminal fluid evidence was later entered into the Federal Bureau of Investigation's (FBI) Combined DNA Index System (CODIS) Database and has been routinely run against the known and unknown offender's lists. As of this date, no matches have ever been made from those attempts. The aforementioned DNA evidence was also entered into the International Criminal Police Organization, more commonly known as INTERPOL, Database, and has been routinely run against the known and unknown offenders with cooperating international police organizations. As of this date, no matches have ever been made from these attempts.

VOLUSIA COUNTY SHERRIF'S OFFICE CASES

Your Affiant has information from the Florida Department of Law Enforcement that through the aforementioned restriction fragment length polymorphism (RFLP) testing, there are at least three (3) criminal sexual battery cases linked in Volusia County, Florida. All of those cases are also cold cases where no arrest was made.

Your Affiant is working to identify the victims in those cases and assist in the prosecution of those cases.

AUTOSOMAL DNA TESTING

Your Affiant has performed a tremendous amount of research in autosomal DNA testing. Your Affiant learned there are many types of DNA tests (not just genealogical ones) — but the one used for family history purposes is called an Autosomal DNA test and it looks at what makes us different from each other. These physical differences (red hair, big nose, long legs...) are inherited from our biological families. Within our DNA there are areas that have mutated over the years to create these differences in the human race. As DNA gets more and more randomized over each generation, differences can only be compared from the past five (5) or six (6) generations — after that it is too mixed up and randomized to be useful for genealogical purposes.

Additionally, humans inherit 50% of their father's DNA and 50% of their mother's DNA – after that DNA is quite random and mixed up. So, the 50% of our mother's DNA could be made up of a large portion of her mother and a small portion of her father. Although she inherited 50% of each parent it has been recombined before being passed on.

It has been determined that humans have forty-six (46) chromosomes, twenty-three (23) from each biological parent. Of the twenty-three (23) chromosomes from each parent, twenty-two (22) (44 in total) of them are called the "autosomes" (this is where the name autosomal test comes from). Chromosomes have areas where each human is different – these differences are called SNPs. If we are closely related to someone our differences are the same as their differences (i.e. red hair, big nose, long legs). The SNPs are the areas of DNA that are used for genealogical purposes and the various SNPs (differences) that are tested can be measured in a certain way that makes them comparable for close relatives. The measure used by the testing companies is a centiMorgan (cM). This is not a simple measurement like inches, or a count of things. It's a mathematical formula that works out what they call "genetic distance." Importantly, the more shared centiMorgan (the higher the number), the closer the match the suspect was to someone (and the more likely they had a shared ancestor). There are in fact two centiMorgan numbers that are relevant in our DNA testing; the "total shared centiMorgan" and the "largest centiMorgan" sometimes called "longest block" (this the is largest segment of DNA, or to put it simply where the shared DNA is all together and not split up). Full siblings have a lot of DNA in common (because they both got 50% from the same parents), they have a shared centiMorgan of around 2,550 but they are not identical because of the DNA inheritance and how the DNA passed on is randomized. Second cousins match at approximately 212.5cM.

Different websites have charts to help work out what the likely relationship of a match is, based on the total shared centiMorgan. These charts become invaluable to search for a common ancestor of the subject and the subject match when looking for a common ancestor one (1) generation back or four (4) generations back. The higher the number, the closer the match.

| August 2017 Blaine T. Bettinger www.TheGenetis/Genealogist.com CC 4.0 Attribution License | | | How to read this chart: | | | | | cat-Great- parent | GGGG- Aunt/Uncle | | |
|--|---|--|--|--|---|-----------------------------------|--|---|-----------------------|----------------------|-----------------------|
| CC 4.0 Antion | on taceuse | Average 1750 4 Range (low-high) (99% Percentile) | | Kange (low-nigh) | | | Great-Great | ent-Grandparent GGG- Aunt/Un | | | |
| HalfGG- Aunt/Uncle 187 12 – 383 | | | G | reat-Grandpare 881 464 - 1486 | nt | 300 | | Great-Great Aunt/Vaclo 427 191 - 885 | | | Other Relationship |
| | Half Great- Aunt/Uncle 432 125 - 765 | | | Grandparent 1766 1156 – 2311 | | | Great Aunt/Uncle 914 251 = 2108 | 171 , 773 | | | 6C 21 0 - 86 |
| | | Half Aunt/Uncle 891 500 = 1446 | | Parent 3487 3330 - 3720 | | Aunt/Uncle 1750 1349 + 2175 | ! | | | | 6C1R 16 0 = 72 |
| Half 3e 61 0 - 178 | Half 2e 117 9 - 397 | Half1C 457 137 - 856 | Half-Sibling 1783 1317 = 2312 | Sibling 2629 2209 ~ 3384 | SELF | 1C 874 553 = 1225 | 26 233 46 = 515 | 3e 74 0 - 217 | 4e 35 0 - 127 | 5° 25 0 = 94 | 6C2R 17 0 = 75 |
| Half 3c1R 42 0 - 163 | Half ze1R 73 0 = 341 | Half1C1R 226 57 = 530 | Half Niece/Nephew 891 500 = 1446 | Nicce/Nephew 1750 1349 - 2175 | Child 3487 3330 - 3720 | iC1R 439 141 = 851 | 2e1R 123 0 = 316 | 3C1R 48 0 = 173 | 4C1R 28 0 - 117 | 5C1R 21 0 ~ 79 | 7C 13 o = 57 |
| Half 3c2R 34 o - 96 | ffalf 2e2R 61 0 - 353 | Half (C2R 145 37 = 360 | Half Great Niece/Nephew 432 125 = 765 | Great- Niece/Nephew 910 251 – 2108 | Grandchild 1766 1156 - 2311 | 1C2R 229 43 - 531 | 2c2R 74 0-261 | 3C2R 35 0 - 116 | 4C2R 22 0 - 109 | 5C2R 17 0 = 43 | 7C1R 43 0 = 53 |
| Half zezR | Half zegR | Half (C3R 87 0 = 191 | Half GO Niece/Nephew 187 12 - 383 | Great-Great- Niece/Nephew 427 191 - 885 | Great- Grandchild 881 464 - 1486 | 1C3R 123 0 = 283 | 2e3R : 67 0 = 139 | 3C3R 22 0 - 69 | 4C3R 29 0 - 82 | 5C3R 11 0 - 44 | 8C 12 0 ~ 50 |

GENETIC GEANAOLOGY

Since June of 2018, investigative genetic genealogy has rapidly emerged as a highly-effective tool for using DNA to determine the identity of unknown individuals (unidentified remains and perpetrators), generating identifications in over sixty (60) law enforcement cases, both cold and active.

Traditional genealogy has been practiced for centuries, using documentary records and oral histories to trace families backwards in time. Until recently, these were the only ways to connect extended family members, but with the advent of direct-to-consumer (DTC) genetic testing, it is now possible to find relatives through shared DNA. This has enabled thousands of individuals who have lost their biological identity through adoption, abandonment, anonymous gamete donation, misattributed parentage, etc., to regain their genetic heritage. More recently, these same tools have been used to identify DNA from suspected perpetrators in more than sixty (60) law enforcement cases.

Unlike traditional forensic DNA analysis, which uses autosomal short tandem repeats (STRs) to generate an identity profile from ~20 loci (a fixed position on a chromosome). Genetic genealogy uses hundreds of thousands of single nucleotide polymorphisms (SNPs) spread across the autosome. Participants in genetic genealogy have had their DNA tested by a direct-to-consumer (DTC) genetic testing company, such as 23andMe or AncestryDNA, which use microarrays to genotype up to ~1 million SNPs.

FLORIDA DEPARTMENT OF LAW ENFORCEMENT BIOLOGY LAB

On November 30, 2018, your Affiant removed the following exhibit from the Orlando Police Department Property Evidence:

Case Number: 1989-9266 Exhibit: E144927 Item: K-7

Item K-7 was transferred to the Florida Department of Law Enforcement for a DNA extraction for single nucleotide polymorphisms (SNP) testing with Parabon NanoLabs.

PARABON NANOLABS

Parabon NanoLabs, Inc. is a company based in Reston, Virginia that provides DNA phenotyping services for law enforcement agencies throughout the United States.

On December 27, 2018, your Affiant shipped the DNA extract from aforementioned item K-7 to the following address for single nucleotide polymorphisms (SNP) testing:

DNA Solutions 755 Research Parkway, Suite 510 Oklahoma City, Oklahoma 73104

Parabon NanoLabs requested DNA Solutions to do the following:

- Genotype the sample
- Use Illumina's GennmeStudio software to convert the raw data to Top Allele format, which reports the genotypes as A/C/G/T and send this data to Parabon NanoLabs via secured upload site that will be provided by Parabon via email.
- Send Parabon the following
 - a) Raw data (iScan data)
 - b) Final report (LogRR, BAF)
 - c) Full Data Table (Top Allele Format)
 - d) Sample Table (with Call Rate and gender estimate)
 - e) Export file for the internal control
 - f) GenomeStudio file

Parabon took the raw DNA and uploaded the data into GEDmatch (gedmatch.com). This site is a free and public website. It is used to provide a tool that is used to examine DNA matches closer, by providing detailed centiMorgan numbers and chromosome browsers to drill down to the detail of how the suspect and those who submitted to the database (two people) match.

By running a GEDmatch "many to one" report, they could have received a list of one thousand, five hundred (1,500) matches. These are people that match our suspect DNA and have also uploaded to GEDmatch. Going across the page of the GEDmatch report we saw two (2) important numbers – total centiMorgan (cM) and largest centiMorgan (cM). GEDmatch sorted the report with the largest shared centiMorgan (cM) at the top.

Members of the Orlando Police Department / Florida Department of Law Enforcement Genetic Genealogy Team had the opportunity to view those results. The results were maintained within GEDmatch and Parabon NanoLabs.

PARABON NANOLABS PHENOTYPE REPORT

On January 16, 2019, Parabon NanoLabs, Inc. prepared a report on the DNA analyzed (aforementioned item K-7) from Orlando Police Department 1989-9266.

According to the report, 101.04 ng od DNA extracted from a vaginal swab (K-7) was sent to DNA Solutions and 25 ng was used for genotyping.

The genetic genealogy assessment resulted in two (2) promising matches from a genealogy perspective (>300 cM of shared DNA; second cousin or closer) and seven (7) potential helpful matches (70 cM - 300 cM; third cousin or closer). Your Affiant explained earlier that a centimorgan (cM) is a measure of genetic distance. Closer relatives share larger amounts of DNA (more cM)

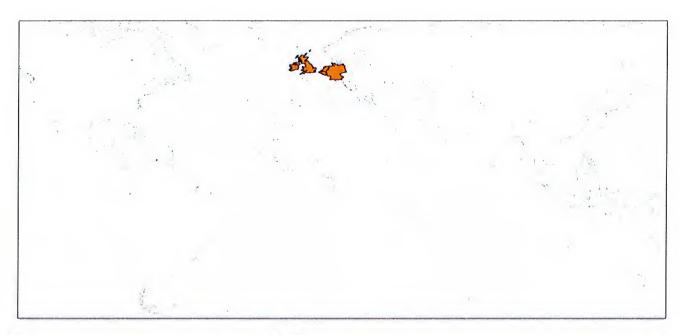
The aforementioned sample known as K-7 was assigned a Level 3 on Parabon's genetic genealogy assessment scale. The following is an excerpt from Parabon NanoLabs Assessment Guide:

Level 3: Medium probability of being solved by GG analysis

This case is expected to produce actionable information for your agency. It may even be possible to identify the unknown subject or narrow down their identity to a list of possibilities from within a specific extended family through GG analysis alone. However, this analysis has additional risk, either because 1) the number of unique, potentially informative matches is small, increasing the probability that detailed family information may not be discoverable — e.g., due to adoption, or 2) a significant amount of family tree building will be required, which likely will not be able to be completed within a standard GG analysis.

GENOMIC ANCESTRY

The map and tables below show the defendant's predicted ancestry proportions (bottom left) and the populations in the Sanpshot ancestry database where those proportions are most common (bottom right). Population similarity is expressed as the number and percentage of individuals in each population who have ancestry proportions similar to the defendant.



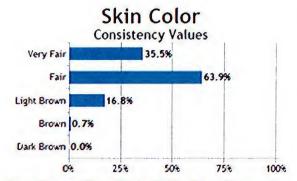
| Region | Percent |
|----------------|---------|
| Europe - North | 96.00% |

| Population | Num | Percent |
|--------------------|-----|---------|
| Europe - North | 655 | 78.00% |
| Europe - Northeast | 29 | 6.10% |
| Europe - Admixed | 9 | 2.60% |
| Europe - West | 15 | 1.20% |

GENOMIC ANCESTRY

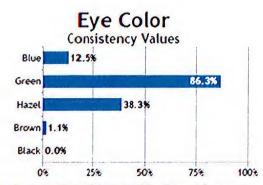
Snapshot DNA Phenotyping Service is the name of the DNA phenotyping tool developed by Parabon NanoLabs that creates composite sketches based on DNA samples. The Snapshot phenotyping prediction models are derived from the application of statistical methods and machine learning algorithms to Parabon's reference database of genotype and phenotype (trait) information, which has been provided by self-consented individuals. The Snapshot composite images presented are algorithmic predictions of face morphology, based on the sex, ancestry and genotype of the tested subject, onto which individually predicted pigmentation traits are superimposed.

The following was based on the report from Parabon NanoLabs from the DNA submitted (K-7):



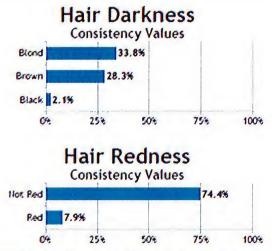
Snapshot predicts this individual would report their skin color as:

- Fair (64.5% confidence)
- Fair / Very Fair (83.2% confidence)
- NOT Brown (99.3% confidence)
- NOT Dark Brown (99.99% confidence)



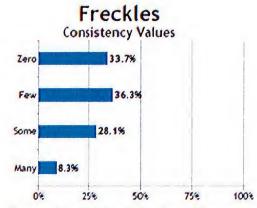
Snapshot predicts this individual would report their eye color as:

- Green (61.7% confidence)
- Green / Hazel (87.5% confidence)
- NOT Brown (98.9% confidence)
- NOT Black (99.99% confidence)



Snapshot predicts this individual would report their hair color as:

- Blond (71.7% confidence)
- Blond / Brown (97.9% confidence)
- NOT Black (97.9% confidence)



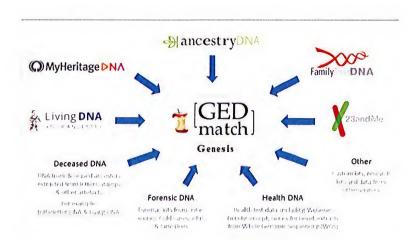
Snapshot predicts this individual would report their level of freckling as:

- Few (66.3% confidence)
- Few / Zero (71.9% confidence)
- NOT Many (91.7% confidence)

GEDmatch

GEDmatch is an open data genomics database and genealogy website in Lake Worth, Florida. GEDmatch is a free, volunteer-run website for people who have already tested their autosomal DNA for genealogical purposes at the following commercial companies:

- Ancestry DNA
- 23andMe
- Family Tree DNA
- MyHeritage DNA
- Living DNA
- WeGene
- GenetiConcept
- Genes for Good



Through the use of GEDmatch, DNA is matched against relatives who have tested their autosomal DNA at any of the above companies and uploaded it to GEDmatch (so if someone tested at one company, they may find matches to people who have tested at other companies). It is a very effective tool to compare and analyze DNA shared with others.

GEDmatch is extremely popular, highly regarded, and provides tools you can't get elsewhere. GEDmatch allows individuals, via the internet, to communicate with one another.

The website gained significant media coverage in April 2018 after it was used by law enforcement to identify a suspect in the Golden State Killer case in California. Other law enforcement agencies began using GEDmatch for violent crimes, making it "the de facto DNA and genealogy database for all law enforcement."

GEDmatch is based in Lake Worth, Florida, but has servers in an unknown location in the State of California. GEDmatch was founded in 2010 by Curtis Rogers, a retired businessman, and John Olson, a transportation engineer, with its main purpose to help "amateur and professional researchers and genealogists," including adoptees searching for birth parents.

GEDmatch users can upload their autosomal DNA test data from commercial DNA companies to identify potential relatives who have also uploaded their profiles. Names of participants can be hidden by the use of aliases, but each account has to have an email address attached to the profile. Tools available on the GEDmatch site include sorting results by the closest matches to a user's autosomal DNA, whether one's matches match each other, genetic distance calculator, estimated number of generations to a common ancestor, whether one's parents are related, and ethnicity calculator. These tools do not disclose raw genetic data to other users.

In April 2018, GEDmatch's privacy statement said it "exists to provide DNA and genealogy tools for comparison and research purposes." The statement said that this, "by its very nature, requires the sharing of information. Because of that, users participating in this site should expect that their information will be shared with other users."

After the arrest of the suspect in the Golden State Killer case, co-founder Curtis Rogers said he spent weeks trying to figure out the ethics of the situation and legal options to pursue. He concluded that they did not have the resources to require police to obtain court orders to use the website. Curtis Rogers said, "It has always been GEDmatch's policy to inform users that the database could be used for other uses, as set forth in the Site Policy," and that "While the database was created for genealogical research, it is important that GEDmatch participants understand the possible uses of their DNA, including identification of relatives that have committed crimes or were victims of crimes."

In late May 2018, GEDmatch updated its policy to say law enforcement could use the database to identify perpetrators of a "violent crime", meaning "homicide or sexual assault", or to identify the remains of a deceased individual. The number of people uploading their DNA increased from 1,500 per day to 5,000 per day after the Golden State Killer case went public. By November 2018 there were 1.2 million GEDmatch website users.

In May 2019 GEDmatch was used to help with the arrest of a teenager who was charged with a violent assault. This was the first time GEDmatch had been used by Law Enforcement (and Parabon) for a case that did not involve homicide, rape or kidnapping. This use of GEDmatch raised concerns with how GEDmatch was being used.

On May 18, 2019, GEDmatch changed their terms of service and privacy policy. Below is the changed policy on GEDmatch (https://www.gedmatch.com/select.php):

GEDmatch.Com Terms of Service and Privacy Policy

Revised May 18, 2019

GEDmatch respects your privacy and recognizes the importance of your personal information. We are committed to protecting your information through our compliance with this Privacy Policy.

This Privacy Policy describes our practices in connection with information we may collect through your use of our website (our 'Site'). By using our Site, you consent to our collection and use of the information described in this Privacy Policy.

GEDmatch Collection and Use of Information

When you register on GEDmatch, we collect your name, an optional alias, and email address to process your registration. Once you are registered, you can provide other personal information such as your sex, Y-DNA or mtDNA haplogroup, genetic sequence/information, Genealogy data, and/or Tier1 payment information. GEDmatch will only collect your personal information if you provide it to us voluntarily. If you are located outside the United States, you consent to the storage, processing, and transfer of your personal information outside your country.

In addition, we automatically collect certain information regarding visitors to our Site, including IP address, information about your equipment, browsing actions, and usage patterns. The information we collect automatically is statistical data and does not include personal information. We use this information solely for internal purposes, such as to improve our Site.

GEDmatch offers you opportunities to engage in forums that are designed to be visible to other users, including comments and postings. You should be aware that any personally identifiable information you choose to submit via these forums can be read, collected, and used by other participants and could be used to send you unsolicited messages. We are not responsible for the personally identifiable information you choose to submit when you engage in such activities.

We may disclose your Raw Data, personal information, and/or Genealogy Data if it is necessary to comply with a legal obligation such as a subpoena or warrant. We will attempt to alert you to this disclosure of your Raw Data, personal information, and/or Genealogy Data, unless notification is prohibited under law.

GEDmatch purpose

GEDmatch exists to provide DNA and genealogy tools for comparison and research purposes. It is supported entirely by users, volunteers, and researchers. DNA and Genealogical research, by its very nature, requires the sharing of information. Because of that, users participating in this Site agree that their information will be shared with other users.

Raw DNA Data Provided to GEDmatch

When you upload Raw Data to GEDmatch, you agree that the Raw Data is one of the following:

- Your DNA;
- DNA of a person for whom you are a legal guardian;
- DNA of a person who has granted you specific authorization to upload their DNA to GEDmatch;
- DNA of a person known by you to be deceased;
- DNA obtained and authorized by law enforcement to identify a perpetrator of a violent crime against another individual, where 'violent crime' is defined as murder, nonnegligent manslaughter, aggravated rape, robbery, or aggravated assault;
- DNA obtained and authorized by law enforcement to identify remains of a deceased individual;
- An artificial DNA kit (if and only if: (1) it is intended for research purposes; and (2) it is not used to identify anyone in the GEDmatch database); or
- DNA obtained from an artifact (if and only if: (1) you have a reasonable belief that the Raw Data is DNA from a previous owner or user of the artifact rather than from a living individual; and (2) that previous owner or user of the artifact is known to you to be deceased).

By registering for GEDmatch and using the Site, you agree that you will not upload Raw Data that does not satisfy one of these categories. If you have previously uploaded Raw Data that does not satisfy one of these categories, you hereby agree that you will remove it immediately.

GEDmatch will not be responsible for any Raw Data provided to GEDmatch in violation of this Policy. Violators of this Policy will have their Raw Data or other personal information deleted without warning, their access will be blocked, and/or other remedial steps may be taken, including any legal action allowed under law.

Privacy

Although you may provide a real name for registration and data upload, you have the option of providing an alias for either login or data. If an alias has been provided, it will be displayed in place of the real name along with results. If your DNA is linked to your Genealogy Data, and only one or the other uses an alias, it may be possible for users to see the real name in the linked data.

In today's world, there are real dangers of identity theft, credit fraud, etc. We try to strike a balance between these conflicting realities and the need to share information with other users. In the end, if you require absolute privacy and security, you agree that you will not provide your personal information, Raw Data, or Genealogy Data to GEDmatch. If you do not agree and you have already provided your personal information, Raw Data, or Genealogy Data, you agree to delete it immediately.

Security

Although GEDmatch has endeavored to create a secure and reliable Site for you, the confidentiality of any communication, material, or personal information provided to GEDmatch via the Site or email cannot be guaranteed.

The original Raw DNA and GEDCOM data you provide to GEDmatch is not kept in its original form. It is converted to a form that makes it more efficient for the software to perform searches and comparisons. The Genealogical Data is loaded into a relational database that might still be recognizable as text. The Raw DNA is converted to a compressed binary format in a process we call 'tokenization.' Although the Raw DNA is not encrypted in the usual sense of the word, it would be very difficult for a human to read it. Original uploaded files are deleted from the Site servers soon after they are processed and archived.

We encrypt your login password before putting it in our database. We cannot tell what your password is. However, there have been cases in the news of encrypted data being hacked and decoded. Be aware that may be a possibility on this or any other Site. We take measures to ensure that only registered users have access to your results, but those measures have not been and never will be perfect. Direct access to your data is available to GEDmatch personnel, including volunteers, on a need to know basis.

Information such as Raw Data, Genealogy Data, and profile information may be stored as an archive copy as part of a backup or recovery plan. When a registered GEDmatch user deletes or requests deletion of Raw Data, Genealogy Data, and/or profile information, copies of that information stored in an archive copy will be deleted upon storage of an updated archive copy, no later than 30 days after the user request.

Research

We may use your data in our own research, to develop or improve applications.

Email addresses

Everybody who registers with the Site must provide a valid email address for the principal contact. It provides log-in verification and allows GEDmatch to contact them if necessary. It also provides a mechanism to verify your identity if you want to contact GEDmatch. You agree to keep your log-in information secure, and to keep your email address up to date.

Your email address and name (or alias, if provided) will be displayed along with any matches to your Raw Data or Genealogy Data. Some users obtain an email address separate from their primary email for this purpose.

You understand that any registered GEDmatch user using the tools available on the Site may gain access to the email address you provide.

Tier1 Payment Information

You may voluntarily obtain access to Tier1 tools on the Site for the recited amount (subject to change). You may provide a one-time payment of any monthly amount, or you may use a 'Monthly Auto Renewal' to establish a recurring amount. Instructions for cancelling a recurring payment are available in the GEDmatch Wiki. Payments can be made via PayPal, and GEDmatch is not responsible for any information provided to GEDmatch by PayPal. Payments may also be provided by personal check to GEDmatch, c/o Curtis Rogers at 710 First Avenue South, Lake Worth, FL 33460. You understand that your personal account information will be made available to GEDmatch when paying by personal check.

GEDCOMs

GEDCOMs (family trees) or other genealogy ('Genealogy Data') provided to GEDmatch remain the property of the person who uploaded it. When you upload your Genealogy Data, you will be provided a unique ID number for that GEDCOM. If you want your Genealogy Data removed from the Site, you may do so yourself by clicking on the 'Manage your resources' link on your home page. If you need assistance deleting a Genealogy Data, contact the Site administrator at GEDmatch@Gmail.Com.

Genealogy research requires the exchange of information. For that reason, all Genealogy Data provided to GEDmatch can be viewed, searched, and compared by any GEDmatch user.

Unless you have permission from living individuals in your Genealogy Data, you agree to privatize living individuals in your Genealogy Data prior to providing it to GEDmatch. This usually involves changing the names of living individuals to 'LIVING' or something similar.

We take steps to prevent your Genealogy Data from being available to the casual web surfer or to the search engines (e.g. Google). However, we cannot guarantee that your information will never be accessed by individuals other than GEDmatch users. If you require absolute security, you agree that you will not upload your Genealogy Data to GEDmatch. If you have already uploaded it, you agree to delete it immediately.

You will be given the opportunity to link your Genealogy Data with your DNA data. This is a powerful tool and we encourage people to use it. It also provides a means of access to your Genealogy Data to people who may have no Genealogy Data of their own at GEDmatch. It will also enable identification of individuals within the provided Genealogy Data, even if the individuals are not identified in the Genealogy Data.

DNA Data

Raw DNA data uploaded to GEDmatch.Com ('Raw Data') remains the property of the person who uploaded it. When you upload a file, a kit number will be assigned at the end of the upload process. This number is unique to the individual DNA upload, and will be used on the pages of this Site to identify your data, including being provided to anyone that shares DNA with the Raw Data. If you wish to contact the Site administrator regarding your data, you must provide the kit number associated with your data. A link or other means is provided within your GEDmatch account to remove your Raw Data from the Site. Alternatively, you can request deletion of your personal information at any time by contacting us at GEDmatch@Gmail.Com. It is possible that an old kit number may be reassigned to another user's uploaded data in the future if you delete your Raw Data.

No means are provided on the Site to make Raw DNA or other DNA data available for download.

There are 4 classes of DNA data on this Site: 'Private', 'Research', 'Public + opt-in' and 'Public + opt-out'. You may be asked to select which category you want to be in when you upload your DNA data. If you ever want to change the category, use the pencil icon link next to the kit number on your home page.

'Private' DNA data is not available for comparisons with other people. It may be usable in some utilities that do not depend on comparisons with other DNA.

'Public + opt-in' DNA data is available for comparison to any Raw Data in the GEDmatch database using the various tools provided for that purpose.

'Public + opt-out' DNA data is available for comparison to any Raw Data in the GEDmatch database, except DNA kits identified as being uploaded for Law Enforcement purposes.

Comparison results, including your kit number, name (or alias), and email will be displayed for 'Public' kits that share DNA with the kit being used to make the comparison, except that kits identified as being uploaded for Law Enforcement purposes will only be matched with kits that have 'opted-in'.

'Research' DNA data is available for one-to-one comparison to other Public or Research DNA. It is not shown in other people's 'one-to-many' results lists. The Raw Data that you uploaded is not made available.

By default, your Raw Data is not available to any user of the Site - not even you. However, you understand that anyone with the kit number for Raw Data can perform many or all of the same GEDmatch functions with that Raw Data that the provider of that Raw Data can perform.

There may be options where you may join a 'sharing pool' which has the potential for disclosing additional information about you or your data. If you choose to join a sharing pool, you should carefully read the conditions and disclaimers associated with that sharing pool. By joining the sharing pool, you are agreeing to abide by those conditions and disclaimers.

Use of Results

The nature of genealogy research requires the exchange of information. That use must also be tempered by respect for the rights and privacy of other individuals. Anybody found to be using this Site in ways not consistent with this principle of human decency will be subject to an immediate ban with all their data removed. Examples include, but are not specifically limited to, spam mailing lists or publishing other people's results or personal information without their permission. This principle also applies to the related or non-related persons included in Genealogy Data or other data uploaded to this Site. Determination of any violation of this principle will be at the sole discretion of GEDmatch administrators.

While the results presented on this Site are intended solely for genealogical research, we are unable to guarantee that users will not find other uses, including both current and new genealogical and non-genealogical uses. For example, some of these possible uses of Raw Data, personal information, and/or Genealogy Data by any registered user of GEDmatch include but are not limited to:

- Discovery of identity, even if there is an alias, unidentifiable email address, and other obscuring information;
- Finding genetic matches (individuals that share DNA);
- Paternity and maternity testing;
- Discovery of unknown or unidentified children, parents, or siblings;
- Discovery of other genetic and genealogical relatives, including both known and unknown or unexpected genetic and genealogical relatives;
- Discovery of ethnic background;
- Discovery of a genetic relationship between parents;
- Discovery of biological sex;
- Discovery of medical information or physical traits;
- Obtaining an email address; and/or
- Familial searching by third parties such as law enforcement agencies to identify the perpetrator of a crime, or to identify remains.

You understand that future genealogical and non-genealogical uses may be developed, including uses that GEDmatch cannot predict or foresee. If you find any of these current or future uses unacceptable, do not provide Raw Data to GEDmatch, and remove any of your Raw Data already provided to this Site.

It is our policy to never provide your Genealogy Data, Raw DNA, personal information, or email address to third parties, except as noted herein.

You have the right to access the personal information that GEDmatch has collected about you. You may do the following at any time by contacting us at GEDmatch@Gmail.Com:

- Opt out of any future contacts from us;
- See what information we have about you, if any;
- Change, correct, or have us delete any information we have about you (including personal information, Raw Data, and Genealogy Data); and
- Express any concern you have about our use of your information.

Future

We cannot predict what the future holds for DNA or genealogy research. We cannot predict what the future will be for GEDmatch. It is possible that, in the future, GEDmatch will merge with, or operations will be transferred to other individuals or entities. If that happens, the operating personnel at GEDmatch will change. GEDmatch reserves the right to provide access to your data (including Raw Data, Genealogy Data, profile information, and other personal information) to those other individuals or entities, which may include people not currently involved in GEDmatch operations. This Policy will continue to apply to the Site until you receive notification of changes to the Policy. If this possibility is not acceptable to you, you agree that you will not provide your personal information, Raw Data, or Genealogy Data to GEDmatch. If you have already provided personal information, Raw Data, or Genealogy Data, you agree to remove it from GEDmatch immediately.

On May 19, 2019, the new policy automatically opted all of its members out of law enforcement searches. The kit owners have the ability to opt-in. This change in policy brought the number of members to search against from one and a half million (1,500,000) profiles down to approximately thirty thousand (30,000) profiles. If law enforcement runs one-to-many reports or one-to-one reports on a law enforcement kit, they will only see matches that have specifically opted in to Law Enforcement Matching. Genealogy users will still have the ability to see all of the public matches.

In this scrial rapist case, the next step was to do a "one-to-one report" in GEDmatch. This report is now blocked by GEDmatch. Your Affiants has specific knowledge that this report does exist. Members of the genetic genealogy team had access to this report prior to May 19, 2019 and witnessed the report. This report is now blocked by GEDmatch. The data is still present in the system. The public has access to the report, but law enforcement does not.

The suspect DNA was assigned a yet to be identified kit number by GEDmatch.

GENETIC GENEALOGY SOLVES CASES

Your Affiant is aware of over sixty (60) cases resolved with the use of genetic genealogy. The following are resolved cases by law enforcement without the use of Parabon NanoLabs:

- California law enforcement investigating the Golden State Killer case uploaded the DNA profile of the suspected serial rapist/killer from an intact rape kit in Ventura County to GEDmatch. It identified 10 to 20 distant relatives of the Golden State Killer, and a team of five (5) investigators working with genealogist Barbara Rae-Venter used this to construct a large family tree, which led them to identify former police officer Joseph James DeAngelo as a suspect. Investigators acquired samples of his DNA from items he discarded outside his home, one of which definitively matched that of the killer. The process took about four months, from when the first matches appeared on GEDmatch, to when DeAngelo was arrested in April 2018.
- In September 2018, Roy Charles Waller was arrested as a suspect in a series of more than ten rapes between 1991–2006 in Northern California (the "Norcal Rapist") after DNA evidence from crime scenes were matched on GEDmatch to a relative. Police then constructed a family tree and using the

- known characteristics of the rapist narrowed the suspects down to Waller. It took little more than a week to identify and arrest the suspect. He was charged with a total of 40 counts of rape that took place in different counties Sonoma, Solano, Contra Costa, Yolo and Butte.
- In March 2019, Paul Jean Chartrand was identified by the FBI's Investigative Genealogy Team as the murderer of Barbara Becker in March 21, 1979 in San Diego. She had been repeatedly stabbed in the neck and back. Investigators found blood in several rooms of the La Jolla home. Police at the time said Becker, 37, had tried to escape her attacker. She had fought hard. Some of the blood was his. However, Chartrand had already died in 1995 of undisclosed causes.
- In April 2019 Terrence Miller of Edmonds, Washington, was arrested for the 1972 killing of 20-year-old Jody Loomis. Loomis left her home and rode her bicycle toward a stable to ride her horse. Her body was found raped, disrobed, and shot in the head in the woods. This is the second arrest in a Snohomish County cold homicide case using results from genetic genealogy, the sheriff's office said in its statement. Police worked with Deb Stone, an Oregon genealogist, to identify the suspect.
- In April 2019, Arthur Rudy Martinez was posthumously identified as the 1977-1978 murderer and rapist of 30-year-old Jane Morton Antunez and 28-year-old Patricia Dwyer Morton in Atascadero, California. Antunez was killed in her car and Dwyer was stabbed to death in her home. Martinez, who'd been paroled after unrelated convictions for attempted murder and rape, lived in the area at the time of the deaths but left soon after, San Luis Obispo County Sheriff Ian Parkinson said. He moved to Spokane, Wash., and received life sentences there for several robberies and two rapes also in 1978. After 16 years in prison, in 1994, he escaped and lived under an alias in California until 2014 when he was diagnosed with terminal cancer. He returned to Washington state and turned himself in to receive medical treatment in prison, Parkinson said. He died behind bars two months later. The homicide cases were reopened three years ago with the Department of Justice's Familial DNA Search Team seeking a familial DNA match to the evidence. Authorities said it led them to a relative of Martinez and a former girlfriend who provided investigators the DNA sample from a razor he had used. A lab determined the DNA from the razor matched that from the crime scenes.
- In May 2019 Seattle, Washington Police announced that the DNA from Frank Wypych matched the DNA from the killer of 20-year-old Susan Galvin. Galvin, a Seattle Police Department records clerk, had died in 1967 from strangulation and had been sexually assaulted. CeCe Moore built family trees of the matches on GEDmatch and found only one man could have been Galvin's killer's, which led police to identify Wypych as a suspect. Wypych had already died in 1987, but Wypych's body was dug up to make the confirmatory DNA match. This makes it the oldest case to be solved using GEDmatch.
- In May 2019, James Richard Curry was identified as the killer of Mary Silvani, formerly known as "Sheep Flats Jane Doe"/"Washoe County Jane Doe." DNA collected from Silvani's rape kit was uploaded to GEDmatch, leading to a tentative identification of the killer. However, the suspect had recently died. After DNA from his son, located in a criminal database, ruled the suspect out, further investigation led to Curry, a half brother born out of wedlock in 1946 and raised in Dallas, Texas under a different family name. Curry died in California on January 7, 1983, from injuries inflicted in a suicide attempt after confessing to three murders in California. His two children volunteered to provide DNA samples after being contacted by investigators. Silvani was also identified using genetic genealogy, making this the first known case in which both the victim and the perpetrator were identified in this way (both through the work of genetic genealogist Cheryl Hester).
- In May 2019, a grand jury in Orange County, North Carolina indicted John Russell Whitt on first-degree murder charges related to the death of his son, Robert "Bobby" Adam Whitt. Bobby Whitt's skeleton was discovered under a billboard on Interstate 85-40 in September 1998; an autopsy showed that he had died by strangulation. Although the case remained open, and hundreds of investigators worked on it over the years—including forensic artist Frank Bender—the remains were unidentified until Barbara Rae-Venter analyzed a DNA sample that suggested the boy had one white parent and one Asian parent. Using online genealogical services, she located a cousin in Hawai'i, who was able

to provide the boy's name. The family had not reported him missing because they believed his mother, Myoung Hwa Cho, had taken him back to South Korea, where she was from. Further investigation revealed that Cho's body had been located in Spartanburg County, South Carolina on May 13, 1998. She had been suffocated and had ligature marks around her wrists. John Whitt has confessed to both murders; he is currently serving a federal prison sentence at the Ashland FCI for armed robbery and will not be eligible for release on that charge until 2037.

In cooperation with American law enforcement organizations, Parabon NanoLabs started uploading DNA evidence from crime scenes to GEDmatch and joined forces with genetic genealogist CeCe Moore to offer genetic genealogy services to law enforcement to identify perpetrators of violent crimes. Parabon said in November 2018 they were working on two hundred (200) cases. CeCe Moore is the head of the genetic genealogy unit responsible for most of the successful investigative genetic genealogy cases.

- In June 2018, law enforcement in Lancaster County, Pennsylvania working with Parabon NanoLabs used GEDmatch to identify a relative of the murderer in the 1992 sexual assault and murder of the schoolteacher Christy Mirack in her home in East Lampeter Township. Raymond Charles Rowe (also known as "D.J. Freez"), was arrested in June 2018. He and Mirack frequented some of the same clubs, and Rowe's route to work took him past Mirack's apartment, Lancaster County District Attorney Craig Stedman said. Stedman said Rowe did not provide a motive when he confessed. Rowe was sentenced to life without parole. He has since been moved to State Correctional Institution Waymart.
- Law enforcement also used GEDmatch and Parabon's genetic genealogist CeCe Moore to narrow down suspects to two brothers in the 1986 rape and murder of 12-year old Michella Welch in Tacoma Washington. Gary C. Hartman, one of the brothers, was arrested and charged with first-degree murder and first-degree rape in June 2018, after police collected his DNA from a discarded restaurant napkin. He pleaded not guilty.
- GEDmatch was also used by CeCe Moore to identify the murderer of 40-year old Virginia Freeman in Brazos, Texas in 1981, as James Otto Earhart, who had been executed in 1999 for another murder.
- In July 2018, John D. Miller confessed to the 1988 rape and murder of 8-year old April Tinsley near Fort Wayne, Indiana, after DNA samples were sent to GEDmatch by Parabon and used to identify his relatives. Miller was sentenced to 80 years in prison.
- Spencer Monnet was identified using GEDmatch and arrested in July 2018 for the burglary and rape of a 79-year-old woman in Utah, 14 weeks after the crime had been committed. He pleaded guilty and was sentenced to five years to life.
- In August 2018, Darold Wayne Bowden was charged with being the Ramsey Street Rapist, a serial rapist who assaulted women in Fayetteville, North Carolina from 2006 to 2008. DNA samples uploaded to GEDmatch were linked to him by the work of CeCe Moore.
- In August 2018, Michael Henslick was arrested as a suspect in the murder of 22-year-old Holly Cassano in 2009 in Champaign, Illinois, after DNA evidence left at the scene was linked to him through GEDmatch and the work of CeCe Moore. He pleaded not guilty and faces between 20-60 years in prison. In September 2018, Marlon Michael Alexander was arrested as a suspect for a series of rapes in Montgomery County, Maryland between 2007–2011 after DNA samples from the rapes were submitted to Parabon, who linked the perpetrator through GEDmatch to two relatives, one of whom, a female relative in Georgia, helped the local police identify Alexander. Alexander plead guilty to two offenses. In May 2019, he was found guilty of three rapes and sentenced to two concurrent life sentences in jail.

- Luke Fleming was arrested in September 2018 as a suspect in the 1999 rape and murder of Deborah Dalzell in Sarasota, Florida. Using autosomal DNA from his sperm and GEDmatch, Parabon and genealogist Barbara Rae-Venter constructed a family tree that pointed to a Florida resident, Joseph Fleming, who was dead, but had two living sons, one of whom, Luke Fleming matched DNA from the crime scene. Luke Fleming's trial date was scheduled for February 2020 and he could face the death penalty if convicted.
- In October 2018 Parabon's CeCe Moore used GEDmatch to identify Robert Eugene Brashers, a "violent serial rapist and murderer", as the 1990 killer of 28-year-old Genevieve Zitricki in Greenville South Carolina, as the rapist of a 14-year-old girl in 1997 in Memphis, Tennessee and the murder of 12-year-old Megan Sherer and her mother 38-year-old Sherri Sherer in Portageville, Missouri in 1998. Brashers had committed suicide in 1999 after he was approached by police officers in Kennett, Missouri. His body was dug up in 2018 and confirmed a match to DNA from the crime scenes.
- Parabon's technology and the work of CeCe Moore led to the arrest of Michael Wayne Devaughn in the murder case of 65-year-old Betty Jones and in the sexual assault case of 81-year-old Kathryn Crigler in Starkville, Mississippi in 1990, who died two months later (called the 'Labor Day Murder'). Devaughn, already in jail for a drug offense, was arrested in October 2018. He faces either the death penalty or life without parole. He pleaded not guilty.
- Parabon helped the Faulkner County, Arkansas police identify Edward Keith Renegar in October, 2018 as the primary suspect of the kidnap, rape and murder of 32-year-old Pam Felkins in Greenbriar, Arkansas in 1990. Renegar was convicted of kidnapping a woman at knifepoint in Arkansas in 1994 but had died in 2002.
- In November 2018 the Fulton County, Georgia police, with the aid of Parabon's DNA Genetic Genealogy unit, tracked down and arrested 61-year-old Jerry Lee in Alabama for the 1997 murder of 28-year-old Lorrie Ann Smith. It was obvious that Smith had fought for her life and Police were able to use blood from the murder scene to extract the killer's DNA. The police noted at the time of the arrest that, "Despite a reward of more than \$30,000 and DNA tests conducted on more than 100 individuals over the last 21 years, Police had been unable to positively identify the suspect until this week."" In May 2019, Lee was released on \$150,000 bond.
- In November 2018, Maryland police, with the help of Parabon, arrested Fred Frampton Jr. for the armed robbery and shooting of 24-year-old Michael Anthony Temple Jr. in Odenton, Maryland in 2010, leaving Temple a quadriplegic. Temple died in 2015 as a result of the 2010 attack. The robbery and murder were committed by two men but the second suspect, Jonathan Ludwig, had died in March 2018.
- In November 2018, Benjamin Lee Holmes was arrested as a suspect in the murder of University of Florida student Christine Franke 17 years earlier in October 21, 2001 when she was shot in the head during a robbery in Orlando, Florida. Parabon used a sample from the crime scene to put the DNA of the killer into GEDmatch and identified three distant cousins. CeCe Moore used genealogy techniques to narrow down to the most likely suspects. Law enforcement interviewed family members, collected DNA samples and compared them to the killer's DNA, Detective Michael Fields (Your Affiant) said, "Through this testing, we were able to show the kinship relationship between the killer and different family members. We eliminated most of the family using genetic genealogy and eventually, we were able to narrow down the suspect list to two brothers, one of which was Benjamin Lee Holmes."
- Parabon and geneticist Barbara Rae-Venter helped the Carlsbad, California police In November 2018 identify David Mabrito as the suspected killer of 39-year-old Jodine Serrin in 2007 using DNA matches to some of his relatives. Mabrito was an itinerant who had family in the area and had died in 2011. Police discovered they already had an unprocessed DNA sample from Mabrito that matched Serrin's killer.
- Parabon and CeCe Moore used GEDmatch to point towards John Arthur Getreu as a suspect in the murder by strangulation of 21-year-old Stanford University graduate Leslie Marie Perlov in 1973

- in Santa Clara, California. After Police found Getreu's DNA matched the DNA from the scene of Perlov's death, they arrested him. Getreu was also later charged with the 1974 murder by strangulation of 21-year-old Janet Taylor in Palo Alto, California.
- In December 2018, Christopher Quinn Williams was arrested in Montgomery, Texas as a suspect in multiple burglaries since October 2015. The burglar broke into homes and fondled sleeping women. He was released on \$160,000 bond.
- In December 2018, Jerry Lynn Burns was arrested as the suspect in the December 1979 murder of 18-year-old Michelle Martinko in Cedar Rapids, Iowa after Parabon used GEDmatch to build the suspect's family tree from his DNA left at the scene and from relatives who had entered their DNA. His trial date is set for October 14, 2019 and he faces up to life without parole. He has pleaded not guilty and denied killing Martinko during an interview with police, court records show. He could not provide a "plausible explanation" for why his DNA would be in Martinko's car, according to charging documents.
- In January 2019, Florida Police announced Parabon had identified William Louis Nichols as the violent rapist of a 12-year-old girl in Hernando County, Florida in 1983 using genetic genealogy but Nichols had already died in 1998 of cancer. Nichols had a history of sexual offenses.
- In January 2019, Russell Anthony Guerrero was arrested in Arizona and had to be extradited to California as a result of Parabon's Genetic Genealogy Unit's work. The Alameda County District Attorney's Office charged him with the December 17, 1990 murder in Fremont, California of Jack Upton who had not shown up to work for several days. Officers went to the 30-year-old man's apartment and found his body. Police called it "a brutal homicide" when announcing the arrest.
- In January 2019, Zachary Bunney was arrested as a suspect in the June 2006, murder of Scott Martinez who was stabbed several times by a sword in La Mesa, California thanks to the work of Parabon's Genetic Genealogy Team. Zachary faces a maximum of 26 years to life in prison. He pleaded not guilty.
- In January 2019, Portland police, with the assistance of Parabon's Genetic Genealogy Team, identified Jerry Walter McFadden as the man who strangled a 20-year-old woman found dead in her apartment in 1979 by matching crime-scene DNA to data in GEDmatch.com. McFadden was executed by lethal injection in 1999 for the rape and slaying of an 18-year-old high school cheerleader, one of three people killed during a day-long murder rampage in 1986, about 100 miles east of Dallas. At the time of his arrest in those killings, he was on parole after three rape convictions.
- In February 2019, Steven Downs was identified and arrested for the 1993 Alaska murder of Sophie Sergie through the genetic genealogy work of Parabon and CeCe Moore. Sergie's body was found by a custodian in the bathroom of an eight-story dormitory. She'd been sexually assaulted, stabbed and shot in the back of the head. He is being held without bail and he claims to be innocent, adamantly denying any involvement in this crime.
- In February 2019, Joseph Holt was identified as the perpetrator of the 1977 murder of Brynn Rainy and the 1979 murder of Carol Andersen through the work of Parabon and their Genetic Genealogy Unit. However, Joseph Holt died in 2014 so he was not arrested.
- In February 2019, Brian Keith Munns of Georgia was arrested for the 1988 murder of Alice Haynsworth Ryan who was stabbed to death in her home. Munns has a criminal history that shows he was charged with first-degree criminal sexual conduct in 1998 to which he pleaded guilty and was in prison from 2001 to 2007 and was released on probation. He was incarcerated again when his community supervision was revoked and was released in 2009, but was sent back in July of that same year for failing to register as a sex offender but was released in October that year.
- In March 2019, Police in South Dakota arrested Theresa (Josten) Bentaas for the 1981 homicide of her baby boy. The 38-year-old cold case of the dead abandoned baby was solved using DNA from genealogy sites to identify the child's mother. The Sioux Falls police discovered a full-term baby dead, wrapped in a blanket and abandoned in a cornfield ditch. The cause of death was judged to be exposure

to the elements. The baby's father was already found on February 15 and he was not charged because he never knew about his son's birth or death. She was charged with first-degree murder, along with the lesser included offenses of second-degree murder and manslaughter. Bentaas is scheduled to go on trial in June 2019, and she faces a maximum of life in prison.

- In March 2019, Florida Police, with the help of GEDmatch and Parabon, arrested Thomas Lewis Garner, who was charged with the 1984 beating and death by strangulation in Sanford, Florida, of 25-year-old Pamela Cahanes who had just graduated from US Naval basic training.
- In March 2019, Parabon used GEDmatch to help police identify Kenneth Earl Day as the person who raped a 53-year-old woman in 1989 and raped and murdered 44-year-old Le Bich-Thuy in 1994 in Rockville, West Virginia. However, Day had already died in 2017 at age 52.
- In March 2019, through the work of Parabon's Genetic Genealogy Unit, 82-year-old Raymond L. Vannieuwenhoven was arrested in Lakewood in connection with the 1976 shooting deaths of a David Schuldes, 25, and Ellen Matheys, 24, at McClintock Park in Silver Cliff, Wisconsin. Matheys was also sexually assaulted. Vannieuwenhoven did not seem surprised when he was arrested. If convicted on all charges he could face 2 consecutive life sentences plus an additional 15 years.
- In March 2019, Coley McCraney, a truck driver with no criminal record, was arrested after genetic testing and the work of Parabon's Genetic Genealogy Team matched his DNA to evidence collected in 1999 from a car trunk that contained the bodies of two girls shot to death in Ozark, Alabama, authorities said. Tracie Hawlett and J.B. Beasley, both 17, had headed out to a party on July 3, 1999, but never arrived. They became lost, and Hawlett called her mother to say they had gotten directions and were headed home. They never arrived there, either. Their bodies were found the next day in the trunk of Beasley's car, less than a half-mile from the pay phone Hawlett used to talk to her mother. Both had been shot in the head, authorities said. Despite hundreds of interviews and seemingly endless hunting, a suspect was never found. The police chief released no details on a possible motive or what the suspect said to investigators following his arrest. McCraney has not entered a plea. Prosecution will seek the death penalty.
- Montana police announced in March 2019 that, with the help of GEDmatch and Parabon, they had identified Cecil Stan Caldwell as the prime suspect in the murder of 24-year-old Clifford Bernhardt and the sexual assault and murder of his wife 24-year-old Linda Bernhardt in Billings, Montana in 1973. However, Caldwell, a former co-worker of Linda Bernhardt, had already died in 2003.
- In March 2019, Parabon's CeCe Moore identified a body that had been found beside the James river in 2016 as 39-year-old Hassan A. Alkebu-Lan of Richmond, Virginia using GEDmatch. Police did not suspect this was a crime scene.
- In April 2019, Greenville, South Carolina police arrested Brook Graham for abandoning her infant daughter on February 1990. The infant was dead when discovered. Parabon linked the baby's DNA to a relative of the father on GEDmatch using genetic genealogy. Police allege Brook Graham put her newly-born infant, along with the placenta and umbilical cord, into a cardboard vacuum cleaner box and ditched the baby in a field near a pile of debris in February 1990. The case is called the "Julie Valentine" case, based on what investigators named the baby. She was originally charged with homicide by child abuse but that was upgraded to murder. The case was the second one to be solved by Parabon using GEDmatch and genetic genealogy in Greenville in a 6-month span after a now-dead man named Robert Eugene Brashers was identified in October 2018 as a serial killer who committed one murder in Greenville. In May 2019, Brook Graham was also charged with unlawful neglect of a child and desecration of human remains in connection with the body of another baby (a boy) found dead in April 1989 in Greenville County.
- In April 2019, Richard E. Knapp was arrested after Parabon used his DNA to find his relatives using genetic genealogy. The police matched Knapp's DNA to that left at the scene of the July 17, 1994 rape and murder of 26-year-old Audrey Hoellein in Vancouver, Washington.

- In April 2019, police from Centerville, Utah arrested a 17-year-old boy for allegedly assaulting a 71-year-old woman on November 17, 2019 while she was practicing the organ in a church meetinghouse. Initially Parabon refused to take on this case but the Police got special permission from Curtis Rodgers, the founder of GEDmatch, on the grounds that the assailant could strike again. Utah detectives found a rock with the alleged perpetrator's DNA and sent it to Parabon, which used GEDmatch and genetic genealogy to identify the suspect. This was the first time GEDmatch had been used by Law Enforcement for a case that did not involve homicide, rape or kidnapping.
- In May 2019, Terre Haute Police Chief Shawn Keen announced that Parabon had helped the agency to identify Jeffrey Lynn Hand as the possible killer of Pamela Milam, 19, who was raped and strangled in 1972. She was last seen on the night of Sept. 15, 1972, leaving a sorority event at Indiana State University in Terre Haute, Indiana, southwest of Indianapolis. Her body was found bound and gagged in the trunk of her car the next night. With the help of Parabon and GEDmatch, police found Hand's widow and two sons, obtained their DNA, and after submitting it to Indiana's state crime lab concluded that Hand was almost certainly the killer. Hand was killed in a shootout with police in 1978 during an attempted kidnapping. Hand had been previously arrested in 1973 for killing a hitchhiker he picked up, but pleaded not guilty of murder by reason of insanity. The case was never tried and Hand was freed from prison in 1976,
- Brian Leigh Dripps confessed to the sexual assault and murder by stabbing of 18-year-old Angie Dodge in 1996 after Idaho Falls, Idaho Police charged him in May 2019. Parabon's CeCe Moore identified Dripps using GEDmatch and genetic genealogy. Previously the police had targeted other men (one of whom was in prison for 20 years) for the murder.
- Eddie Lee Anderson was arrested as the suspect in the 1976 murder of Leslie Penrod HarrisHarris, 30, disappeared on May 17, 1976, after having dinner with her husband at a Costa Mesa restaurant. Her body was found hours later about five miles away in Irvine. Officials said she'd just moved to Orange County at the time of her death. Harris was found near the former Marine Corps Air Station El Toro, an area investigator said would've been unfamiliar to civilians. Despite the fact investigators immediately suspected a military connection, they were never able to identify a suspect and the case went cold. Anderson was stationed at El Toro in the early 1970s and lived less than a mile from the restaurant where Harris was last seen. Authorities said DNA found at the crime scene had been tested twice before, in 1997 and 2016, but they did not point to any suspect.

There have been over sixty (60) cases resolved with genetic genealogy. Without the assistance of GEDmatch, the above cases would still be unresolved.

STALLED INVESTIGATION

The raw data in your Affiant's serial rapist case had already been entered into GEDmatch by Parabon NanoLabs. The next step in this serial rapist investigation would be to do a "one-to-one report" in GEDmatch. This GEDmatch report would show where the defendant's chromosomes match the second DNA match and would also give an estimate of where the most recent common ancestor (mrca) is and how many generations back (parents are one (1) generation, grandparents are two (2) generations, etc.) the relationship is.

But that cannot take place because GEDmatch changed the conditions of their database. Your Affiant knows the data is available to complete a family tree. Once the family tree is built, there can be a scientific way of excluding family members on the family tree which would narrow down the suspect list and enviably lead your Affiant to the defendant.

CONCLUSION

Your affiant knows that GEDmatch users have the option of making their sites public or private. When a site is public, all GEDmatch users can view much of the site's information, such as the user's profile and biographical information, email addresses, shared centimorgans, and multiple reports. The owner of the public site is purposely loading this information onto GEDmatch with the sole purpose of matching other profiles. The profile owner had to go through a series of steps that could take weeks and even months in order to complete the posting on GEDmatch.

The above-listed data is open for public viewing, but not open for law enforcement viewing, which means your Affiant should not access the necessary information without a search warrant. Although most of the information on this site is knowingly being shared with others and thus contains no reasonable expectation of privacy, 18 U.S.C 2703 and F.S. 934 require a search warrant when the government seeks to obtain the contents of communications from an electronic communications service provider.

Information provided by GEDmatch indicates that they keep track of their subscriber accounts by assigning each subscriber a Kit Number. The Kit Number for the serial rapist is related to Orlando Police Department Case Number: 1989-9266.

Information provided by GEDmatch indicates the following information is available to law enforcement upon service of proper process:

- GEDmatch kit number for all one-to-one matches
- Letter following GEDmatch kit number for one-to-one matches
- Email address for all one-to-one matches
- Real name associated with all one-to-one matches
- Alias associated with all one-to-one matches
- Date and time stamp of one-to-one matching profile's creation date
- Most recent logins for all one-to-one matches
- Registered mobile number for all one-to-one matches
- Many-to-one report

GEDmatch Kit Data for Orlando Police Department Case Number: 1989-9266

- "Predict your eye colour" report
- Admixture Reports
- Archaic DNA Comparisons
- All GEDCOMs

One-to-one Report for Orlando Police Department Case Number: 1989-9266

- Kit Number Matches (to include first character to show testing company)
- Type (chip version of the test kit)
- Sex (gender of tester entered by user)
- Haplogroup (to include mitochondria and Y chromosome)
- Autosomal (information on how much DNA is shared on chromosomes 1 to 22)
 - o Total cM (total cM shared)
 - o Largest cM (the size of the longest individual segment of DNA)
 - o Generation (the estimated number of generations back to the MRCA)
- X-DNA (information on how much X-DNA is shared on chromosome 23
 - o Total cM (total cM shared)
 - o Largest cM (the size of the longest individual segment of DNA)
- Matching Segment Report for all matches
- Triangulation Report
- Relationship Predictor
- Name (the match's name or optional alias)
- Email (email address of the match or kit administrator)

Your Affiant believes that this information is relevant to the issues of the current investigation for the following reasons. Your Affiant knows based on his training and experience as previously set forth, that GEDmatch has participated in over sixty (60) solved cases. GEDmatch is extremely popular, highly regarded, and provides tools your Affiant can't get elsewhere. All of the above information was available to your Affiant until May 19, 2019. It is unfortunate, but this same information is available to the public without restrictions.

Your Affiant believes that the GEDmatch data will contain information that will aid in establishing the nature of the relationship between the defendant and family members. Your Affiant believes that GEDmatch could contain sufficient reliable, competent, and admissible evidence in order to prove beyond a reasonable doubt, the participation of the defendant in the aforementioned Armed Sexual Batteries, Kidnapping's and Armed Burglaries.

It should be noted that the Florida Legislature passed section 92.605 Florida Statutes, effective July 1, 2003, which provides that out-of-state electronic communication service providers doing business with the public must accept Florida subpoenas, court orders or search warrants. Proper service includes U.S. mail and facsimile. California Penal Code section 1524.2 (2003) contains similar provisions. Specifically, subsection (c) states, "A California corporation that provides electronic communication services or remote computing services to the general public, when served with a warrant issued by another state to produce records that would reveal the identity of the customers using those services, data stored by, or on behalf of, the customer, the customer's usage of those services, the recipient or destination of communications sent to or from those customers, or the content of those communications, shall produce those records as if that warrant had been issued by a California court."

Subsection (a)(6) provides,

"Properly served" means that a search warrant has been delivered by hand, or in a manner reasonably allowing for proof of delivery if delivered by United States mail, overnight delivery service, or facsimile to a person or entity listed in Section 2110 of the Corporations Code."

FLORIDA DIVISION OF CORPORATIONS

On June 2, 2019, your Affiant performed a public record check via SunBiz.org. The records showed GEDmatch is a registered for-profit company with the Florida Division of Corporations. The records indicate that GEDmatch first registered on August 26, 2011 via Stephen W. Hall, Attorney at Law.

According to the Florida Division of Corporations, the following information is listed for GEDmatch, Inc.:

Florida Profit Corporations GEDMATCH, INC.

Filing Information:

Document Number : P11000076990 FEI/EIN Number : 45-3169637 Date Filed : August 26, 2011

State : Florida Status : Active

Principle Address:

710 1st Avenue South Lake Worth, Florida 33460

Mailing Address:

710 1st Avenue South Lake Worth, Florida 33460

Registered Agent Name & Address:

Curtis C. Rogers 270 Captains Walk Apt 319 Delray Beach, Florida 33483

Officer / Director Detail:

Title PD John Olson 710 1st Avenue South Lake Worth, Florida 33460

Title: VSTD
Curtis C. Rogers
710 1st Avenue South
Lake Worth, Florida 33460

WHEREFORE, your Affiant hereby makes application for a Search Warrant authorizing the Affiant, and/or other representatives of the Orlando Police Department, with proper and necessary assistance, to search the above described material in a manner consistent with F.S. 92.605 and California Penal Code section 15.24.2, by delivering said warrant via facsimile or U.S. mail to an authorized legal representative of GEDmatch.com, and to seize any and all of the aforesaid property found by virtue of such Search Warrant and to list the property seized on a return and inventory, to be filed within this Judicial Circuit within ten (10) days of execution.

IT SHOULD BE NOTED THE INVESTIGATION INTO THIS CASE IS STILL ONGOING AND IT IS FOR THAT REASON THAT IT IS REQUESTED THAT THIS AFFIDAVIT AND ALL OTHER DOCUMENTS PERTAINING TO THIS CASE REMAIN SEALED FROM PUBLIC RECORD UNTIL SUCH TIME AS THE COURT HAVING JURISDICTION BELIVES THAT IS NO LONGER NECESSARY TO PROTECT THE INTEGRITY OF THE INVESTIGATION.

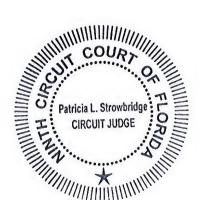
THIS SEARCH WARRANT IS ISSUED PURSUANT TO FLORIDA STATUTE S. 92.605. A RESPONSE IS DUE WITHIN 20 BUSINESS DAYS OF RECEIPT OF THIS WARRANT UNLESS A LONGER TIME PERIOD IS STATED HEREIN.

PURSUANT TO F.S. 934.25(6) and 18 U.S.C. 2705(b) - YOU ARE ORDERED NOT TO DISCLOSE THE EXISTENCE OF THIS WARRANT TO THE USER UNTIL THE CONCLUSION OF THE INVESTIGATION. ANY SUCH DISCLOSURE WILL IMPEDE THE INVESTIGATION AND THEREBY OBSTRUCT JUSTICE.

WHEREFORE, Affiant makes this affidavit and prays the issuance of a Search Warrant in due form of law for the search of the above described premises for the said property heretofore described, and for the seizure and safe keeping thereof, subject to the Order of a Court having jurisdiction thereof, by the duly constituted officers of the law.

AFFIANT – DETECTIVE MICHAEL FIELDS

SWORN TO and SUBSCRIBED before me this join day of June, 2019, in Orange County, Florida.



CIRCUIT JUDGE PATRICIA L. STORWBRIDGE